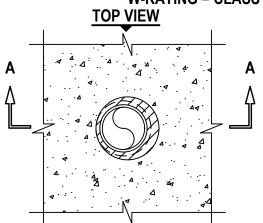
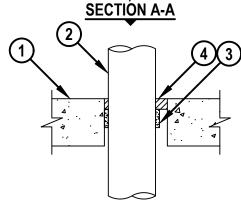
UL SYSTEM NO. C-AJ-2565

PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR. T-RATING = 0-HR.

W-RATING = CLASS I (SEE NOTE NO. 3 BELOW)





- 1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 4-1/2" THICK).
 - **B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.**
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
 - A. MAXIMUM 4" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - B. MAXIMUM 4" NOMINAL DIAMETER ABS PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - C. MAXIMUM 4" NOMINAL DIAMETER FRPP PLASTIC PIPE.
 - D. MAXIMUM 4" NOMINAL DIAMETER RIGID NONMETALLIC CONDUIT (RNC).
- 3. HILTI CP 648S WRAP STRIP WRAPPED CONTINUOUSLY AROUND CIRCUMFERENCE OF PIPE, AND HELD IN PLACE WITH INTEGRATED FASTENING TAPE. WRAP STRIP TO BE RECESSED MAXIMUM 1-1/4" FROM BOTTOM SURFACE OF FLOOR OR MINIMUM 1" FROM BOTH SURFACES OF WALL TO ACCOMMODATE FIRE FOAM (SEE TABLE BELOW).
- 4. MINIMUM 1" DEPTH HILTI CP 620 FIRE FOAM FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF A WALL.

NOMINAL PIPE DIAMETER	PRODUCT DESCRIPTION	MAXIMUM DIAMETER OF OPENING	ANNULAR SPACE	
			MINIMUM	MAXIMUM
1-1/2"	CP 648S - 1.5" US	3"	3/16"	3/4"
2"	CP 648S - 2" US	3-1/2"	3/16"	15/16"
3"	CP 648S - 3" US	4"	3/16"	5/16"
4"	CP 648S - 4" US	6"	3/8"	1-1/8"

NOTES: 1. HILTI CP 648S WRAP STRIPS AND HILTI CP 620 FIRE FOAM ARE REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.

- 2. CLOSED OR VENTED PIPING SYSTEM (PVC, ABS, FRPP, RNC = SCHEDULE 40).
- 3. W-RATING APPLIED ONLY TO NOMINAL 1-1/2" DIAMETER PIPES.



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Scale	7/64" = 1"
Date	Apr. 07, 2022

CAJ 2565c

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